

SEQUENCE LISTING

<110> Insel, Paul A.
 Herrmann, Volker
 Buescher, Rainer
 Liggett, Stephen

<120> METHODS AND COMPOSITIONS FOR IDENTIFYING
 VARIATIONS IN HUMAN ALPHA 1BETA- AND BETA 2 - ADRENERGIC
 RECEPTOR GENES

<130> 220002058901

<140> US 09/402,244

<141> 1999-09-29

<150> PCT/US98/23496

<151> 1998-11-04

<150> 60/086,232

<151> 1997-11-10

<160> 12

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic primer

<400> 1

cgggggaagc aaagtttca

19

<210> 2

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic primer

<400> 2

cggcagtaca tgactagaat

20

<210> 3

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic primer

<400> 3	
ctctccttgg gtggaagga	19
<210> 4	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic primer	
<400> 4	
agtcacacag taaacccaag	20
<210> 5	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic primer	
<400> 5	
gaatgaggct tccaggcgctc	20
<210> 6	
<211> 19	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic primer	
<400> 6	
gatgatgcct aacgtcttg	19
<210> 7	
<211> 18	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic primer	
<400> 7	
ttctacgtgc ccctgggtg	18
<210> 8	
<211> 19	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic primer	
<400> 8	
tcctctagga ctaaagctc	19

<210> 9
 <211> 2719
 <212> DNA
 <213> Homo sapiens

<400> 9
 ctcgaggaat tctcttttccc tcttttaggt gctggacaag ttgcatatcc cgttaaatacc 60
 ggggcccact ccgacagccc cctattaaag gtaagcagcc cccaaccac ctttgacacg 120
 gaagagtgc tagcggggaa aataacccca gcgggcgccct aggggtgggt gaccgcgat 180
 ctccacgccc aggtcccgcc ctcccgcccc tcccccgtc cccgcccccc gtagaggtga 240
 ccctggggagc ggcgggggag gttggctttc ggtcttgagg gtggtgaccc gcgatctcca 300
 cgcccaaggc ccgcctcgc ggccctgccc cccgcccccc cccgcaagag gcgcgcctg 360
 ggagcggcgg ggtaacgcgg ctggcttccc ggcttgccgg gtggcggcgt cggggctgcg 420
 ggcgtccttg gctggaccgc cattgcccc tagtgccgcg cggagtcagg gcgcgggct 480
 ccccgccctg atgtcacccg cgtgcagtca gccagaagc ggctcattga agcagaccct 540
 ctccggcgct cgtggggcgg agggcgcgc gcggtccgca gaccgagcg agctgggcac 600
 cgccggggcg cccgcctcc ccccccctct cccctccgct ccccgcgag cccggccagg 660
 cgcgctcctg acgtggacca ttaacttgg agctgcgcgc tcgtccctc tctcctcct 720
 cctccctctg acaggcgagc gagcgactcg gtgcaggcag gagacgtgct gcgggctggg 780
 ctgcccgggg gagatgactc ctgccaggag gggcgccctt gggaagaaga ccacggggga 840
 agcaaagttt cagggcagct gaggagcctt cgcgcagcc cttccgagcc caatcatccc 900
 cctggctatg gagggcggac tctaagatga atcccgacct ggacaccggc cacaacacat 960
 cagcacctgc ccactgggga gaggtgaaaa atgccaactt cactggcccc aaccagacct 1020
 cgaggggggg cacactgccc cagctggaca tcaccagggc catctctgtg ggcctgggtc 1080
 tgggcgcctt catcctcttt gccatcgtgg gcaacatcct agtcatcttg tctgtggcct 1140
 gcaaccggca cctgcggacg cccaccaact acttcattgt caacctggcc atggccgacc 1200
 tgctgttgag ctccaccgtc ctgcccttcg cagcggccct agaggtgctc ggctactggg 1260
 tgctggggcg gatcttctgt gacatctggg cagccgtgga tgcctgtgc tgcacagcgt 1320
 ccattctgag cctgtgcgcc atctccatcg atcgctacat cggggtgcgc tactctctgc 1380
 agtatccac gctggtcacc cggaggaagg ccattctggc gctgctcagt gtctgggtct 1440
 tgtccaccgt catctccatc gggcctctcc ttgggtggaa ggagccggca cccaacgatg 1500
 acaaggagtg cggggtcacc gaagaacct tctatgcct cttctcctct ctgggctcct 1560
 tctacatccc tctggcgggt attctagtca tgtactgccc tgtctatata gtggccaaga 1620
 gaaccacca gaacctagag gcaggagtca tgaaggagat gtccaactcc aaggagctga 1680
 ccctgaggat ccattccaag aactttcacg gtccaactcc aaggagctga ccctgaggat 1740
 ccattccaag aactttcacg aggacacct tagcagtacc aaggccaagg gccacaacc 1800
 caggagtcc atagctgtca aactttttaa gttctccagg gaaaagaaag cagctaagac 1860
 gttgggcatt gtggtcggta tgttcatctt gtgctggcta ccttcttca tcgctctacc 1920
 gcttggttaag ttgggcacta gcagcagggg gactgggcat ttttgacct tgggtttact 1980
 gatgagctta ctctaaagtt ttttgtgggt tttgtttctt atgcagtctg tgcgtgttcg 2040
 gagattgaat aatattgttt gttctgcaaa gggtttgagc attggggagc tggctaaaaa 2100
 ccaactcagg tgtagtaga acacgctaag gcactagctt ctgaaataga accagggaag 2160
 gaaaatctgg tatgaggaat gactcactca acagcctcgg ttaataaatt aaaaagatat 2220
 tactgggct tgaatatcac accggcgcta tttcagtagt aatgatgtgt cggctaaggc 2280
 agcgtcacta atgcagcata caaaatagtt tgtagttact gcagagacag catttgggaa 2340
 gcagggaggc agctcgtaca cagaaaggca gcattcattc agcatttcca gggctagagc 2400
 agaagccacg cttcttcaag agctttcaga ggctgcattc tctccctccc ctcttactg 2460
 acagctatca cccagatata ctacgttcat tatccgttaa taagagcatt ttacagccac 2520
 acagcccaaa ccagccttta agttattgaa atcttgagat gtgaaagaga agatgactag 2580
 agggtcacac atttttagtt ttaccacca aaatgtttct aactctagtg atttatggaa 2640
 tgccagaat caaattatag ttgtccctca tctcagctga cagagaccaa atcctggtaa 2700
 gatggaattc ggttaccct 2719

<210> 10
 <211> 2300
 <212> DNA

<213> Homo sapiens

<400> 10

gaattcatgc	cgcgttttctg	tgttggacag	gggtgacttt	gtgccggatg	gcttctgtgt	60
gagagcgcgc	gcgagtgtgc	atgtcgggtga	gctgggaggg	tgtgtctcag	tgtctatggc	120
tgtggttcgg	tataagtcta	agcatgtctg	ccaggggtgta	tttgtgcctg	tatgtgcgtg	180
cctcgggtggg	cactctcggt	tccttccgaa	tgtggggcag	tgccgggtgtg	ctgccctctg	240
ccttgagacc	tcaagccgcg	caggcgccca	gggcaggcag	gtagcggcca	cagaagagcc	300
aaaagctccc	gggttggctg	gtaagcacac	cacctccagc	tttagccctc	tggggccagc	360
cagggtagcc	gggaagcagt	ggtggcccgc	cctccaggga	gcagttgggc	cccggccggg	420
ccagcctcag	gagaaggagg	gcgaggggag	gggagggaaa	ggggaggagt	gcctcgcccc	480
ttcgcggtg	ccggcgtgcc	attggccgaa	agttcccgtg	cgtcacggcg	agggcagttc	540
ccctaaagtc	ctgtgcacat	aacgggcaga	acgcactgcg	aagcggcttc	ttcagagcac	600
gggctggaac	tggcaggcac	cgcgagcccc	tagtaccgga	caagctgagt	gtgcaggacg	660
agtccccacc	acaccacac	cacagccgct	aaatgaggct	tccaggcgctc	cgctcgcggc	720
ccgcagagcc	ccgcccgtgg	tccgcctgct	gaggcgcccc	cagccagtgc	gcttacctgc	780
cagactgcgt	gccatggggc	aacccgggaa	cggcagcgcc	ttcttgctgg	cacccaatag	840
aagccatgcy	ccggaccacg	acgtcacgca	gcaaagggac	gaggtgtggg	tgggtgggcat	900
gggcatcgct	atgtctctca	tcgtcctggc	catcggtgtt	ggcaatgtgc	tgggtcatcac	960
agccattgcc	aaagttcgagc	gtctgcagac	ggtcaccaac	tacttcatca	cttcaactggc	1020
ctgtgctgat	ctgggtcatgg	gcctggcagt	gggtgccctt	ggggccgccc	atattcttat	1080
gaaaatgtgg	acttttggca	acttctggtg	gcagtttttg	acttccattg	atgtgctgtg	1140
cgtcacggcc	agcattgaga	ccctgtgcgt	gatcgagtg	gatcgctact	ttgccattac	1200
ttcacctttc	aagtaccaga	gcctgtgcac	caagaataag	gcccgggtga	tcattctgat	1260
gggtgtggatt	gtgtcaggcc	ttacctcctt	cttgcccatt	cagatgcact	ggtaccgggc	1320
caccaccag	gaagccatca	actgctatgc	caatgagacc	tgctgtgact	tcttcacgaa	1380
ccaagcctat	gccattgcct	cttccatcgt	gtccttctac	gttcccctgg	tgatcatggt	1440
cttcgtctac	tccagggctc	ttcaggaggc	caaaaggcag	ctccagaaga	ttgacaaatc	1500
tgagggccgc	ttccatgtcc	agaaccttag	ccaggtggag	caggatgggc	ggacggggca	1560
tggactccgc	agatcttcca	agttctgctt	gaaggagcac	aaagccctca	agacgttagg	1620
catcatcatg	ggcactttca	ccctctgctg	gctgcccttc	ttcatcgcta	acattgtgca	1680
tgtgatccag	gataacctca	tccgtaagga	agtttacatc	ctcctaaatt	ggataggcta	1740
tgtcaattct	ggtttcaatc	cccttatcta	ctgcgggagc	ccagatttca	ggattgcctt	1800
ccaggagctt	ctgtgcctgc	gcaggtcttc	tttgaaggcc	tatgggaatg	gctactccag	1860
caacggcaac	acaggggagc	agagtggata	tcacgtggaa	caggagaaag	aaaataaact	1920
gctgtgtgaa	gacctcccag	gcacggaaga	ctttgtgggc	catcaaggta	ctgtgcctag	1980
cgataacatt	gattcacaag	ggaggaattg	tagtacaaat	gactcactgc	tgtaaagcag	2040
tttttctact	tttaaagacc	ccccccccca	acagaacact	aaacagacta	tttaacttga	2100
gggtaataaa	cttagaataa	aattgtaaaa	ttgtatagag	atatgcagaa	ggaagggcag	2160
ccttctgcct	tttttatatt	tttaagctgt	aaaaagagag	aaaacttatt	tgagtgatta	2220
tttgttatct	gtacagttca	gttcctcttt	gcatggaatt	tgtaagttaa	tgtctaaaga	2280
gcttttagtcc	tagaggacct					2300

<210> 11

<211> 602

<212> DNA

<213> Artificial Sequence

<220>

<223> Homo sapiens adrenergic, alpha-1B-, receptor

<221> variation

<222> (1)...(602)

<223> n = a or g or c or t/u

<400> 11

nncgaacnga	cagtgaggag	ccttcgccgc	agcccttccg	agcccaatca	tccccctggc	60
------------	------------	------------	------------	------------	------------	----

tatggagggc	ggactctaag	atgaatcccg	acctggacac	cggccacaac	acatcagcac	120
ctgcccactg	gggagagttg	aaaaatgcc	acttcactgg	ccccaaccag	acctcgagca	180
actccacact	gccccagctg	gacatcacca	gggccatctc	tgtgggcctg	gtgctgggcg	240
ccttcactct	ctttgccatc	gtgggcaaca	tcttagtcat	cttgtctgtg	gcctgcaacc	300
ggcacctgcg	gaagcccacc	aactacttca	ttgtcaacct	ggccatggcc	gacctgctgt	360
tgagcttcac	cgctctgccc	ttctcagcgg	ccctagaggt	gctcggctac	tggtgtctgg	420
ggcggatctt	ctgtgacatc	tgggcagccg	tggatgtcct	gtgctgcaca	gcgtccattc	480
tgagcctgtg	cgccatctcc	atcgatcgct	acatcggggg	gcgctactct	ctgcagtatc	540
ccacgctggg	cacccggaag	aangccatct	tggcgtctgt	cantgtctgg	gtcttgtcca	600
cc						602

<210> 12

<211> 604

<212> DNA

<213> Artificial Sequence

<220>

<223> Homo sapiens adrenergic, beta-2-, receptor

<221> variation

<222> (1)...(604)

<223> n = a or g or c or t/u

<400> 12

nnnnnnnnag	ggtttgtgct	ccttcaagca	gaaattggaa	gatctgcgga	gtccatgccc	60
cgtcogccca	tctgtctcca	cctggctaag	gttctggaca	tggaagcggc	cctcagattt	120
gtcaatcttc	tggagctgcc	ttttggcctc	ctgaaagacc	ctggagtaga	cgaagaccat	180
gatcaccagg	ggaacgtaga	aggacacgat	ggaagaggca	atggcatagg	cttggttcgt	240
gaagaagtca	cagcaggtct	cattggcata	gcagttgatg	gcttcctggg	gggtggcccn	300
gtaccagtgc	atctgaatgg	gcaagaagga	ggtaaggcct	gacacaatcc	acaccatcag	360
aatgatcacc	cgggccttat	tcttggtcag	caggctctgg	tacttgaaag	gtgaagtaat	420
ggcaaagtag	cgatccactg	cgatcacgca	cagggctctca	atgctggccg	tgacgcacag	480
cacatcaatg	gaagtccaaa	actcgcacca	gaagttgcca	aaagtccaca	ttttcataag	540
aatatgggcg	gccccaaagg	gcaccactgc	naggcccatg	accagatcag	cacaggccag	600
tgaa						604